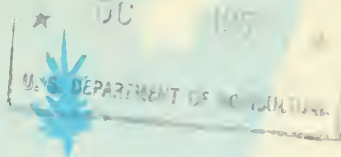


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How Ohioans Choose Their Christmas Trees

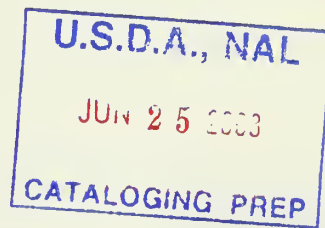


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in cooperation with the Ohio Agricultural Experiment Station

FOREWORD

This report is a result of a cooperative project between the Central States Forest Experiment Station and the Ohio Agricultural Experiment Station. It is a part of the NCM-20 Regional Project, Marketing and Production of Christmas Trees in the North Central Region. The Ohio Christmas Tree Growers Council furnished the trees used in the displays.



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How Ohioans Choose Their Christmas Trees

What influences a Christmas tree shopper to buy a particular Christmas tree? This Christmas an estimated two million trees will decorate Ohio homes and shops. Many of these are grown in Ohio, and all of them are sold by Ohio retailers. As a result, Ohio growers want to know what species and type of trees to produce to assure a profitable sale, and retailers want to know more about what consumers prefer so that they won't be left with trees on the lot on December 26.

To provide some of this information, a survey was conducted in Cleveland, Cincinnati, and Columbus by the Ohio Agricultural Experiment Station and the Central States Forest Experiment Station. The survey was designed to find out: (1) The species consumers prefer, (2) the grade or quality of Christmas tree they prefer, and (3) the reasons for these preferences.

The information was obtained by personal interview. Christmas trees obtained from wholesalers in the Columbus area were arranged in displays on Christmas tree lots in the three cities during the 1957 Christmas season. Displays consisted of 15 Christmas trees: Three each of Scotch pine, white pine, red pine, balsam fir, and Norway spruce. All trees were between 5 and 7 feet in height including stand and were so located that each could be examined separately. There was one tree of each species for each of the three grades (U. S. Premium, U. S. No. 1, and U. S. No. 2) recognized in the United States Standards for Christmas Trees. Displays were distributed widely throughout each city and moved each day in order to get a representative sample. As potential customers looked at trees on a lot, they were asked to answer questions about the display trees. In all, approximately 600 Christmas tree buyers were interviewed. They are believed to be fairly representative of Ohio metropolitan areas; however, they did have a slightly better average family income than the average for the State. Approximately three-fourths of them had annual family incomes between \$4,000 and \$10,000.

Species Preference

Scotch pine was definitely the most popular tree and red pine the least popular (table 1)^{1/}. Scotch pine was also the most popular second choice species. About one-fifth of the interviewees rated balsam fir and Norway spruce as either their first or second choice species.

There were some differences among consumers in the three cities. Although Scotch pine was first choice in all three, Clevelanders showed the strongest preference for this species; Columbus consumers preferred white pine and balsam fir to a greater extent than did those in the other cities; Cincinnatians showed the strongest preference for Norway spruce (table 2).

Consumers from different cities also differed as to the least desirable Christmas tree species (table 3). Those in Cleveland rated the Norway spruce least desirable; almost 50 percent of the Cincinnati consumers rated red pine as the least desirable Christmas tree species. Columbus consumers' decisions as to the least desirable species were very close to the average for the other two cities. Only about 10 percent of them rated Scotch pine as the least desirable species.

The consumers were also asked what species they bought the previous year (1956). Their selection was very similar to their current preference (table 4). About 70 percent of the people who had bought balsam fir and Scotch pine in 1956 indicated they still preferred those species. However, only 30 to 40 percent of the buyers of other species indicated they preferred those same species again this year.

Christmas tree buyers most often mentioned needle-holding ability, custom or family tradition, and certain appearance factors as reasons for buying a particular species. When asked which was the most important consideration, the interviewees' answers were distributed as follows:

| | <u>Percent</u> |
|--|----------------|
| Needle-holding ability | 27 |
| Traditional species | 17 |
| Good density | 16 |
| Foliage color and length | 12 |
| Shape and balance | 11 |
| Miscellaneous (easy to decorate, availability, price, fresh appearance, etc.) | 17 |
| | <u>100</u> |

^{1/} Tables in Appendix, beginning page 5.

Height Preference

Most Christmas tree buyers prefer trees 5 to 7 feet tall with a 6-foot tree being the most popular. Those who bought Scotch pine and Norway spruce preferred shorter trees than did those who bought balsam fir, red pine, or white pine (table 5).

Quality Preference

There has been a growing realization among producers, wholesalers, and retailers of Christmas trees that not only do the present-day consumers prefer a certain species, but they also are willing to pay more for the better grades of trees. This idea was borne out by the survey.

After consumers had indicated their choice of species from among the display trees, they were asked to select the particular tree of that species they liked best. As mentioned earlier, the display trees for each species were of three grades, but the grade name was not identified to the consumer. The grades used to separate the trees were the United States Standards for Christmas Trees (table 6).

After examining the trees, the consumers made the following decisions:

| | Consumer's Choice (Percent) | | |
|---|-----------------------------|---------|---------|
| | (Premium) | (No. 1) | (No. 2) |
| Grade of tree preferred when all grades are the same price | 63 | 25 | 12 |
| Grade of tree preferred when prices are varied by grade ^{2/} | 44 | 36 | 20 |

Apparently most consumers prefer premium trees over lower grade trees, but many of them would purchase a lower grade tree if it were much cheaper.

Childhood Home of Consumer a Factor

The area of the United States in which a consumer was raised is apparently a factor in the species preference of a consumer (table 7).

^{2/} Prices were arbitrarily set as follows: Premium--\$6.00; No. 1--\$4.00; and No. 2--\$2.00.

Apparently most people who were raised in the Midwest (a Christmas tree importing area) prefer balsam fir and Norway spruce. In contrast, the majority of consumers from the Christmas tree exporting states of Pennsylvania and Michigan prefer the pines, especially Scotch. So, Ohio Christmas tree growers who wish to export trees to other midwestern states might do well to plant more Norway spruce. Actually in 1956 Ohio growers put about 70 percent of their production into pine and only 10 percent into Norway spruce and balsam fir.^{3/}

Consumer's Income Affects Choice of Tree

When the price differential for the three grades was considered, about 60 percent of the people who made more than \$10,000 preferred premium-grade trees while only about 40 percent of the people who made the lower incomes said they would buy a premium tree. Of those making less than \$10,000, about 20 percent selected a lower grade tree than the premium because it was cheaper. Slightly less than 10 percent of those making more than \$10,000 would change their preference on the basis of price.

Conclusions

Many things influence consumers' preferences for Christmas trees. These include such tangibles as species, price, grade, and appearance as well as such intangibles as custom or family background.

Almost 40 percent of the 600 consumers interviewed said they preferred Scotch pine for their Christmas tree. Of the species on display, red pine was considered the least desirable Christmas tree. Most consumers buy a tree because of its appearance, needle-holding ability, or because of family tradition.

About two-thirds of the Christmas tree users interviewed preferred a premium-grade tree. However, if the premium-grade tree costs much more than the other trees, almost one-fifth of the buyers who prefer the premium-grade tree would switch to a lower grade tree.

With Christmas tree production constantly increasing, Christmas tree producers need to carefully consider their market and the kind and species of trees they are producing. They need to observe consumers' expressed preferences and guide their production accordingly.

^{3/} Quigley, Kenneth L. and Mitchell, Glen H. Ohio-grown Christmas trees--production and marketing. Cent. States Forest Expt. Sta. Tech. Paper 152, 17 pp., illus. 1958.

APPENDIX

Table 1.--How consumers rate various species of Christmas trees
(In percent)

| Tree species | Most desirable | 2nd choice | Least desirable |
|---------------|----------------|------------|-----------------|
| Scotch pine | 38 | 25 | 7 |
| Balsam fir | 25 | 21 | 21 |
| Norway spruce | 19 | 23 | 22 |
| White pine | 10 | 18 | 17 |
| Red pine | 8 | 13 | 33 |
| Total | 100 | 100 | 100 |

Table 2.--Most preferred Christmas tree species by city
(In percent)

| Tree species | Cleveland | Columbus | Cincinnati |
|---------------|-----------|----------|------------|
| Scotch pine | 43 | 35 | 34 |
| Balsam fir | 26 | 29 | 20 |
| Norway spruce | 14 | 13 | 31 |
| White pine | 5 | 18 | 8 |
| Red pine | 12 | 5 | 7 |
| Total | 100 | 100 | 100 |

Table 3.--Least preferred Christmas tree species by city
(In percent)

| Tree species | Cleveland | Columbus | Cincinnati |
|---------------|-----------|----------|------------|
| Scotch pine | 4 | 11 | 5 |
| Balsam fir | 17 | 20 | 27 |
| Norway spruce | 31 | 22 | 12 |
| White pine | 25 | 17 | 9 |
| Red pine | 23 | 30 | 47 |
| Total | 100 | 100 | 100 |

Table 4.--Changes in species preference
(In percent)

| Species | Purchased in 1956 | Rated most desirable in 1957 |
|------------------|-------------------|---------------------------------|
| Scotch pine | 35 | 38 |
| Balsam fir | 27 | 25 |
| Norway spruce | 12 | 19 |
| White pine | 7 | 10 |
| Red pine | 6 | 8 |
| Other or unknown | 13 | -- |
| Total | 100 | 100 |

Table 5.--Tree-height preferences
(In percent of trees by species)

| Species | Tree height preferred | | | | |
|---------------|-----------------------|-------|-------|-------|--------------------|
| | Less than: 5 ft. | 5 ft. | 6 ft. | 7 ft. | More than 7 ft. |
| Scotch pine | 7 | 28 | 45 | 15 | 5 |
| Balsam fir | 4 | 17 | 38 | 31 | 10 |
| Norway spruce | 12 | 25 | 44 | 11 | 8 |
| White pine | 3 | 15 | 45 | 25 | 12 |
| Red pine | 6 | 19 | 36 | 26 | 13 |
| All species | 6 | 21 | 41 | 22 | 10 |

Table 6.--United States Standards for Christmas Trees

| Factor ^{1/} | U. S. Premium | U. S. No. 1 | U. S. No. 2 |
|----------------------|-----------------------------|--|--|
| Density | Medium | Medium | Light |
| Taper | Normal | Normal (flaring or candlestick if tree is otherwise U. S. Premium) | Normal (flaring or candlestick if tree is otherwise U. S. No. 1) |
| Balance | 4 complete faces | 3 complete faces | 2 complete faces |
| Foliage | Fresh, clean and healthy | Fresh, clean and healthy | Fresh, fairly clean, and free from damage |
| Deformities | Not more serious than minor | Not more serious than minor (noticeable deformities permitted if tree otherwise U. S. Premium) | Not more serious than minor (noticeable deformities permitted if tree otherwise U. S. No. 1) |

^{1/} Factor, quality, size, and species definitions are explained in United States Standards for Christmas Trees (22F.R.7767) 1957, by U. S. Agricultural Marketing Service.

Table 7.--Relation of consumer's childhood home to
species preference
(In percent of consumers by State)

| Childhood home | Prefer Scotch pine | Prefer red or white pine | Prefer balsam fir or Norway spruce |
|---------------------------|-----------------------|-----------------------------|---------------------------------------|
| Pennsylvania | 60 | 17 | 23 |
| Ohio | 40 | 20 | 40 |
| West Virginia | 34 | 28 | 38 |
| Michigan | 31 | 23 | 46 |
| Kentucky | 26 | 12 | 62 |
| Midwest ^{1/} | 12 | 18 | 70 |
| Other areas ^{2/} | 33 | 16 | 51 |

^{1/} Indiana, Illinois, Wisconsin, Minnesota, Iowa, and Missouri.

^{2/} Other states and foreign countries.

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